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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,160	09/26/2001	John A. M. Cameron	WEAT/0150	9581
36735	7590	10/14/2004	EXAMINER	
MOSER, PATTERSON & SHERIDAN, L.L.P. 3040 POST OAK BOULEVARD, SUITE 1500 HOUSTON, TX 77056-6582			HALFORD, BRIAN D	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 10/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/964,160

Applicant(s)

CAMERON, JOHN A. M.

Examiner

Brian D Halford

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 9, 13-29 and 32-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-23, 26, 32, 33, 43 and 44 is/are allowed.
- 6) ☒ Claim(s) 1-3, 9, 13-17, 24-25, 27-29, 34-42 and 45-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 9, 13-14, 28 and 34-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans *et al.* in view of Castano-Mears *et al.* With reference to columns 1-6, Evans *et al.* disclose an encapsulation (A) for downhole protection of control lines. The protective encapsulation (A) is illustrated in Figures 1-4. With reference to lines 3-55 of column 3, the protective encapsulation (A) comprises an elastomeric crescent-shaped sheath *or* line housing (14), which envelops two metal tubulars (12, 13). The metal tubulars serve as fluid control lines; however, Evans *et al.* teach in lines 65-68 of column 4 the control lines convey myriad types of control fluids. The geometry of the sheath *or* line housing (14) is such that it possesses a first arcuate wall and a second wall, which are connected to form a line housing (14). Further, Evans *et al.* disclose in lines 60-68 of column 4 that the size and shape of the sheath *or* line housing (14) may be modified as necessary. To that effect, lines 13-21 of column 4, disclose a modified protective encapsulation (A). The protective encapsulation (A), as shown in Figure 3, possesses a notch (20), "...to allow the

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sheath to bend at the notch slightly in order to better conform to the outside surface (21) of the production tubing (B)." Thus, the elastomeric sheath ~~or~~ line housing (14) is capable of deforming to a complimentary contour. Furthermore, as disclosed in lines 22-36 of column 4, the protective encapsulation (A) is fabricated from an elastomeric material or any other material that affords sufficient flexibility.

The protective encapsulation (A) of Evans *et al.* is capable of being disposed between an expandable tubular and the wellbore. However, the patent to Evans *et al.* fails to specifically disclose disposing the protective encapsulation (A) between an expandable tubular and the wellbore. The patent to Castano-Mears *et al.* disclose numerous interchangeable embodiments of expandable well screen assemblies and a method of employment, which contains a step of placing a sealing device between an expandable sand screen assembly and the wellbore. With initial reference to Figures 1A (unexpanded) and 1B (expanded) in concert with lines 45-67 and 1-34 of respective columns 3 and 4, external sealing devices (28, 30, 32, 34) are expanded into sealing contact with the wellbore (20) when the expandable screen assembly (12) is expanded. The final paragraph of column 4 discloses that the expandable well screen assembly (12) may be radially expanded with any method. For example, a swage may be passed through the base pipe. Turning now to lines 45-52 *and* 45-55, 63-64 of respective columns 1 *and* 3, the well screen assemblies expand radially outwardly to substantially contact a casing, a consolidated formation or an unconsolidated formation; furthermore, the expandable well screen assemblies

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possess enhanced torsional and tensile strength to prevent the costly collapse of an unconsolidated formation. A particular embodiment of the expandable well assembly relied upon in the instant rejection is illustrated in Figures 5-7. The attendant features of this expandable well screen assembly are disclosed in lines 9-67 of column 7. With reference to aforementioned lines of column 7, the expandable well screen (60) possesses, *inter alia*, inner and outer walls, a perforated base pipe and a filter media (66) that envelops the base pipe. Connectors (72) are employed to connect the filter media (66); advantageously, the connectors (72) create a, "...convenient location..." for lines (74). As specifically disclosed in lines 6-11 and 62 of respective columns 2 and 7, communication lines (74) reside externally of the connector (72). With emphasis on lines 55-59 of column 7, communication lines (74) may include hydraulic lines for delivering or returning fluid downhole, chemical injection lines, electric lines for communicating data or transmitting power downhole and communication lines, which include fiber-optic lines. Furthermore, Castano-Mears *et al.* teach in lines 59-61 that *any* type of line (74) can be employed in combination with the principles of the invention. Therefore it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to dispose the encapsulation of Evans *et al.* between the outer surface of the tubular body of Castano-Mears *et al.* and the wellbore to encapsulate the external lines of Castano-Mears *et al.* thereby protecting the lines from inhospitable wellbore conditions.

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3. Claims 15-17, 24-25, 27, 29 and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castano-Mears *et al.* in view of Evans *et al.* The patent to Castano-Mears *et al.* disclose numerous interchangeable embodiments of expandable well screen assemblies and a method of employment thereof. With initial reference to lines 45-52 *and* 45-55, 63-64 of respective columns 1 *and* 3, the well screen assemblies expand radially outwardly to substantially contact a casing, a consolidated formation or an unconsolidated formation; furthermore, the expandable well screen assemblies possess enhanced torsional and tensile strength to prevent the costly collapse of an unconsolidated formation. Furthermore, as shown in Figures 1A (unexpanded) and 1B (expanded), the method of Castano-Mears *et al.* entails placing a sealing device between an expandable sand screen assembly and the wellbore. With reference to the noted drawing figures and lines 45-67 and 1-34 of respective columns 3 and 4, external sealing devices (28, 30, 32, 34) are expanded into sealing contact with the wellbore (20) when the expandable screen assembly (12) is expanded. The final paragraph of column 4 discloses that the expandable well screen assembly (12) may be radially expanded with any method. For example, a swage may be passed through the base pipe. A particular embodiment of the expandable well screen assembly relied upon in the instant rejection is illustrated in Figures 5-7. The attendant features of this expandable well screen assembly are disclosed in lines 9-67 of column 7. With reference to aforementioned lines of column 7, the expandable well screen (60) possesses, *inter alia*, inner and outer walls, a perforated base pipe and a filter

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media (66) that envelops the base pipe. Connectors (72) are employed to connect the filter media (66); advantageously, the connectors (72) create a, "...convenient location..." for lines (74). As specifically disclosed in lines 6-11 and 62 of respective columns 2 and 7, communication lines (74) reside externally of the connector (72). With emphasis on lines 55-59 of column 7, communication lines (74) may include hydraulic lines for delivering or returning fluid downhole, chemical injection lines, electric lines for communicating data or transmitting power downhole and communication lines, which include fiber-optic lines. Furthermore, Castano-Mears *et al.* teach in lines 59-61 that *any* type of line (74) can be employed in combination with the principles of the invention.

The patent to Castano-Mears *et al.* fails to disclose the use of an encapsulation to serve as a line (74) housing. The patent to Evans *et al.* disclose an encapsulation (A) for downhole protection of control lines. The protective encapsulation (A) is illustrated in Figures 1-4. With reference to lines 3-55 of column 3, the protective encapsulation (A) comprises an elastomeric crescent-shaped sheath *or* line housing (14), which envelops two metal tubulars (12, 13). The metal tubulars serve as fluid control lines; however, Evans *et al.* teach in lines 65-68 of column 4 the control lines convey myriad types of control fluids. The geometry of the sheath *or* line housing (14) is such that it possesses a first arcuate wall and a second wall, which are connected to form a line housing (14). Further, Evans *et al.* disclose in lines 60-68 of column 4 that the size and shape of the sheath *or* line housing (14) may be modified as necessary. To that effect, lines 13-21 of column 4, disclose a modified protective encapsulation (A). The

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protective encapsulation (A), as shown in Figure 3, possesses a notch (20), "...to allow the sheath to bend at the notch slightly in order to better conform to the outside surface (21) of the production tubing (B)." Thus, the elastomeric sheath *or* line housing (14) is capable of deforming to a complimentary contour.

Furthermore, as disclosed in lines 22-36 of column 4, the protective encapsulation (A) is fabricated from an elastomeric material or any other material that affords sufficient flexibility. Therefore it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to posit the external lines of Castano-Mears *et al.* within the encapsulation of Evans *et al.* thereby protecting the lines from inhospitable wellbore conditions.

#### ***Allowable Subject Matter***

4. Claims 18-23, 26, 32-33 and 43-44 are allowed.

#### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-3, 9, 13-17, 24-25 and 27-29 have been considered but are moot in view of the new ground(s) of rejection.

6. The Examiner notes that applicant's amendments to claims 1, 9, 13 and 28 are directed towards limiting the intended use of the encapsulation with an expandable tubular. The amendment fails to further define structural limitations of the claimed encapsulation. The encapsulation of Evans *et al.* is capable of performing the intended use as recited by applicant. Applicant is reminded of the following form paragraph.



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A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

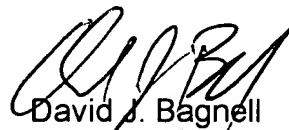
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Halford whose telephone number is (703) 306-0556. The examiner can normally be reached on M-F 10:30-8:00; alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J Bagnell can be reached on (703) 308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David J. Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

bdh bdh  
7 October 2004